KPG-5084US

Appln. No.: 10/661,236

Amendment Dated August 23, 2004 Reply to Office Action of June 7, 2004

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

- 1. (Currently amended) A method for forming a printing plate comprising a printing plate precursor comprising a radiation-sensitive layer, said radiation sensitive layer exhibiting sensitivity to radiation in a first frequency spectrum and to radiation in a second frequency spectrum other than said first frequency spectrum, said precursor forming a printing plate following imagewise exposure in an exposure device the method comprising exposing said printing plate precursor to said radiation in said first frequency spectrum, wherein said imagewise exposure (i) generates imagewise exposed and unexposed areas of said plate and (ii) generates undesirably unexposed areas due to unwanted shading during said imagewise exposure, the method comprising identifying and pre-exposing to radiation in said second frequency spectrum prior to placing said precursor in said exposure device any areas of said areas of said precursor undesirably unexposed plate subject to undesirable shading during said imagewise exposure.
- 2. (Original) The method according to claim 1 wherein said printing plate is a positive working lithographic printing plate.
- 3. (Original) The method according to claim 1 wherein said printing plate is a negative working lithographic printing plate.
- 4. (Currently amended) The method according to claim 1 wherein said undesirable shading undesirably unexposed areas result results from applying a clamping device on said precursor during said imagewise exposure of said precursor.
- 5. (Currently amended) A method for forming a printing plate comprising a printing plate precursor comprising a radiation-sensitive layer, said radiation sensitive layer

Amendment Dated August 23, 2004 Reply to Office Action of June 7, 2004

exhibiting sensitivity to radiation in a first frequency spectrum and to radiation in a second frequency spectrum other than said first frequency spectrum, the method comprising imagewise exposing said printing plate precursor to said radiation in said first frequency spectrum and exposing to radiation in said second frequency spectrum any areas of said plate subject to undesirable shading during said imagewise exposure as a result of applying a clamping device on said precursor during said imagewise exposure of said precursor, The method according to claim 4 wherein said clamping device is transparent to said second frequency radiation.

6. (Original) The method according to claim 5 wherein said clamping device comprises clear glass, polymethyl methacrylate, polycarbonate, polyvinyl chloride, glass fiber-reinforced polyester, magnesium fluoride, barium fluoride, calcium fluoride, potassium bromide, lithium fluoride, thallium halides, chalcgenide glass, polycrystalline zinc selenide, zinc sulfide, lanthanide sulfides, fused silica, quartz, UVT acrylic or a combination thereof.

7. (Cancelled)

- 8. (Currently amended) The method according to claim $\frac{1}{5}$ wherein the undesirably shaded unexposed areas of said plate are identified and exposed to said radiation in said second frequency spectrum following the imagewise exposing the precursor to the first frequency spectrum radiation.
- 9. (Currently amended) The method according to claim ± 5 wherein the undesirably shaded <u>unexposed</u> areas of said plate are identified and exposed to said radiation in said second frequency spectrum during the imagewise exposing the precursor to the first frequency spectrum radiation.

Amendment Dated August 23, 2004 Reply to Office Action of June 7, 2004

- 10. (Original) The method according to claim 1 wherein said precursor is heat sensitive and said imagewise exposure comprises imagewise heating said plate precursor layer.
- 11. (Currently amended) The method according to claim 9 10 wherein said heat sensitive precursor comprises a photothermal conversion material.
- 12. (Currently amended) A method according to claim 1 wherein said first frequency radiation is heating radiation and said second frequency radiation for forming a printing plate comprising a heat sensitive printing plate precursor said precursor also exhibiting sensitivity to at least is one of visible and ultraviolet radiation, the method comprising exposing by imagewise heating said printing plate precursor and also exposing to at least one of said visible and ultraviolet radiation any areas of said plate undesirably unexposed areas shaded during said imagewise heating exposure of said precursor.
- 13. (Currently amended) The method according to claim 12 further comprising, following said imagewise exposure the step of exposing by imagewise heating the printing plate precursor and the step of exposing any areas of said plate undesirably shaded during said imagewise heating exposure of the precursor, developing said printing plate precursor.
- 14. (Currently amended) The method according to claim 12 wherein said heat sensitive precursor comprises a photothermal conversion material.
- 15. (Currently amended) The method according to claim 12 wherein said undesirable shading undesirably unexposed areas result results from applying a clamping device on said precursor during said imagewise exposure of said precursor.
- 16. (Currently amended) The method according to claim 15 5 wherein said first frequency spectrum radiation is heating radiation and said second frequency spectrum

KPG-5084US

Appln. No.: 10/661,236

Amendment Dated August 23, 2004 Reply to Office Action of June 7, 2004

radiation is one of visible or ultraviolet radiation and wherein said clamping device is transparent to at least one of said visible or ultraviolet radiation.

- 17. (Original) The method according to claim 16 wherein said clamping device comprises clear glass, polymethyl methacrylate, polycarbonate, polyvinyl chloride, glass fiber-reinforced polyester, magnesium fluoride, barium fluoride, calcium fluoride, potassium bromide, lithium fluoride, thallium halides, chalcgenide glass, polycrystalline zinc selenide, zinc sulfide, lanthanide sulfides, fused silica, quartz, UVT acrylic, or a combination thereof.
- 18. (Currently amended) The method according to claim 13 16 wherein the undesirably shaded unexposed areas of said plate are identified and exposed to said at least one of visible or ultraviolet radiation prior to the step of exposing the precursor by imagewise heating.
- 19. (Currently amended) The method according to claim 13 16 wherein the undesirably shaded unexposed areas of said plate are identified and exposed to said at least one of visible or ultraviolet radiation during the step of exposing by imagewise heating the precursor.
- 20. (Currently amended) The method according to claim 13 16 wherein the undesirably shaded unexposed areas of said plate are identified and exposed to said at least one of visible or ultraviolet radiation following the step of exposing by imagewise heating the precursor.

21. (Cancelled)

22. (Currently amended) The method according to claim 21 28 wherein said exposure to said at least one of visible and ultraviolet radiation is performed with a fluorescent light source positioned at an exit of said platesetter imagesetter and extending across said exit.

Amendment Dated August 23, 2004 Reply to Office Action of June 7, 2004

- 23. (Currently amended) <u>The A method according to claim 1 for forming a printing plate, the method comprising the steps step of:</u>
- (a) <u>imagewise</u> exposing a printing plate precursor comprising a radiation sensitive layer over a support with radiation in a first frequency region and forming exposed and unexposed <u>imaged</u> regions in the radiation sensitive layer, in which <u>wherein (i)</u> the radiation sensitive layer exhibits sensitivity to radiation in the first frequency region and to radiation in a second frequency region, and wherein (<u>ii</u>) the first frequency region and the second frequency region are not the same, <u>and</u> (<u>iii</u>) the <u>imagewise</u> exposure leaves undesirable unexposed regions in the radiation sensitive layer,;
- (b) exposing at least one of the <u>undesirable</u> unexposed regions with radiation in the second frequency region, and forming at least one additional exposed region; and
- (c) developing the printing plate precursor with a developer to form the printing plate.
- 24. (Original) The method of claim 23 in which the first frequency region is in the ultraviolet, and the second frequency region is in the infrared.
- 25. (Original) The method of claim 23 in which the first frequency region is in the infrared, and the second frequency region in the ultraviolet.
- 26. (Currently amended) The method of claim 23 <u>wherein said exposure to radiation in said first and said second frequency spectra creates exposed regions on said precursor and wherein in which the exposed regions are removed by the developer.</u>
- 27. (Currently amended) The method of claim 23 <u>wherein said exposure to</u> radiation in said first and said second frequency spectra creates exposed regions on

Amendment Dated August 23, 2004 Reply to Office Action of June 7, 2004

<u>said precursor and wherein in which</u> the unexposed regions are removed by the developer.

- 28. (New) A method for forming a printing plate comprising a heat sensitive printing plate precursor said precursor also exhibiting sensitivity to at least one of visible and ultraviolet radiation, the method comprising:
- (a) exposing said printing plate precursor by imagewise heating in an imagesetter;
- (b) exposing to at least one of said visible and ultraviolet radiation any only areas of said plate undesirably shaded during said imagewise heating exposure of said precursor as said precursor exits said imagesetter following said exposure to imagewise radiation; and
- (c) developing said printing plate precursor.